

Abstract of Disclosure

A Bandband Processor for Wireless Communications is presented.

The invention encompasses several improved Turbo codes method to provide a more practical and simpler method for implementation a Turbo Codes Decoder in ASIC or DSP coding. (1) A plurality of pipelined pipelined Log-MAP decoders are used for iterative decoding of received data. (2) In a pipeline mode, Decoder A decodes data from the De-interleaver RAM memory while the Decoder B decodes data from the De-interleaver RAM memory at the same time. (3) Log-MAP decoders are simpler to implement in ASIC with only Adder circuits, and are low-power consumption. (4) Pipelined Log-MAP decoders method provide high speed data throughput, one output per clock cycle.